memory to determine if an error has occurred and/or when a refill is expected. Additionally, the pill dispenser **112** may access the prescription stored in internal memory to determine if a scheduled pill bottle was actually inserted into a recess **13**, which may be logged for compliance tracking; for example, a bottle of 30 pills should be taken every day starting on the first day of a particular month, and if no pills were inserted into a recess **13** on the first day of the particular month, the pill dispenser **112** determines that non-compliance has occurred. The pill-bottle identifying camera **114** may capture: the time of delivery, the number of tablets, the dosage of each pill, the dosage of each scheduled oral taking of one or more pills, when the prescription was filled, a refill time, the pills indicated by the label to be in the bottle, etc. This information may be communicated to a caregiver and/or a patient having a monitoring client **2**.

[0244] FIG. **15** shows a pill dispensing mechanism **117** in accordance with an embodiment of the present disclosure. A cartridge **118** includes a plurality of containers **119** to house pills. The cartridge **118** may be rotated by a stepper motor. A sliding member **120** can slide such that a hole **121** moves adjacent to one of the containers **119** to allow the pill to dispenser. The sliding member **120** may be coupled to a linear actuator, e.g., a linear servo.

[0245] FIG. **16** shows a flow chart diagram of a method **122** for dispensing a pill in accordance with an embodiment of the present disclosure. The pill dispenser of method **122** may be any sufficient pill dispenser disclosed herein. The method **122** includes acts **123-129**.

[0246] Act **123** instructs a pill-dispensing mechanism to dispense a pill. Act **124** instructs a first pill-viewing camera to capture a first image of the pill. Act **125** determines a presence of the pill within the first image. Act **126** instructs the first pill-viewing camera to capture a second image. Act **127** determines an absence of the pill within the second image. Act **128** instructs an identifying camera to capture a third image. Act **129** identifies a user using the third image.

[0247] A number of implementations have been described. Nevertheless, it will be understood that various modifications may be made. Accordingly, other implementations are within the scope of the following claims. For example, while various principles have been described herein, it is to be understood by those skilled in the art that this description is made only by way of example and not as a limitation as to the scope of the disclosure. Other embodiments are contemplated within the scope of the present disclosure in addition to the embodiments shown and described herein. Modifications and substitutions by one of ordinary skill it the art are considered to be within the scope of the present disclosure.

What is claimed:

1. A pill dispenser, comprising:

a shelf;

a pill-dispensing mechanism configured to dispense a pill to the shelf;

a pill viewing area operatively coupled to the pill-dispensing mechanism;

a first pill-viewing camera positioned to capture a first image of the pill viewing area including the shelf; and

a second pill-viewing camera positioned to capture a second image of the pill through a transparent bottom of a cup configured to receive the pill from the pill viewing area;

at least one processor in operative communication with the pill-dispensing mechanism and the first pill-viewing camera, the at least one processor configured to:

instruct the pill-dispensing mechanism to dispense a pill to the pill viewing area;

instruct the first pill-viewing camera to capture the first image of the pill;

instruct the second pill-viewing camera to capture the second image of the pill; and

identify the pill using the first and second images.

2. The pill dispenser according to claim **1**, wherein the at least one processor identifies the pill using at least one of a color of the pill, a shape of the pill, characters on the pill, and a plurality of colors of the pill as determined using the first and second images.

3. The pill dispenser according to claim **1**, wherein the pill viewing area is internal to the pill dispenser.

4. The pill dispenser according to claim **3**, further including a storage medium for storing processor executable instructions configured for execution by the at least one processor for dispensing the pill to a pill holding area outside of a housing.

5. The pill dispenser according to claim **1**, further comprising a scale, wherein the at least one processor is in operative communication with the scale and receives a weight therefrom, wherein the storage medium further comprises processor executable instructions configured for execution by the at least one processor for identifying the pill based upon, at least in part, an estimated weight of the pill using the scale.

6. The pill dispenser according to claim **5**, wherein the at least one processor estimates the weight of the pill by subtracting an estimated weight of the.

7. The pill dispenser according to claim **5**, wherein the at least one processor does not dispense the pill unless the identity of the pill is determined to be appropriate based on information from at least one of an electronic medical record, a drug error reduction system, or a monitoring client.

8. A pill dispenser, comprising:

a pill viewing area internal to the pill dispenser;

a pill-dispensing mechanism configured to dispense a pill into the pill viewing area;

a door mechanism associated with the pill viewing area, wherein the door mechanism is configured to hold the pill within the pill viewing area;

a pill-viewing camera positioned to capture an image of the pill viewing area;

a second pill-viewing camera positioned to capture a second image of the pill through a transparent bottom of a cup configured to receive the pill from the pill viewing area; and

at least one processor in operative communication with the pill-dispensing mechanism, the pill-viewing camera, and the door mechanism, the at least one processor configured to:

instruct the pill-dispensing mechanism to dispense a pill to the pill viewing area;

instruct the pill-viewing camera to capture the image of the pill;

verify the pill using the image;

instruct the door mechanism to dispense the pill from the pill viewing area into the cup after the pill is verified using the image; and